Montana Communicable Disease Weekly Update: 03/19/10

DISEASE INFORMATION

Summary – Week 10 – Ending 03/13/10 – Disease reports received at DPHHS during the reporting period March 7-13, 2010 included the following:

- Vaccine Preventable Diseases: Invasive *Streptococcus pneumonia* (1), Invasive Meningococcal Disease (1), Varicella (17)
- Enteric Diseases: Campylobacteriosis (4), Cryptosporidiosis (3), Giardiasis (5), Salmonellosis (2)
- Other Conditions: Viral Meningitis (1), Tuberculosis (4)
- Travel Related Conditions: None

NOTE: The report has multiple pages reflecting the following information: (1) vaccine preventable and enteric diseases YTD; (2) other communicable diseases YTD; (3) cases just this week; (4) clusters and outbreaks; and (5) an STD summary.

Surveillance Snippets – Serologic Testing for Acute Infection

Some diseases are detected using serologic assays. Many of these diseases like vector-borne diseases, and many vaccine preventable diseases, require TWO blood specimens in order to confirm that the disease in question is recently acquired. IgM and IgG antibodies in the blood are measured to determine whether a person's infection is recently acquired.

- In general, a high IgM titer is an indicator of a specific and recent infection.
- However, IgG is also used to confirm a recent infection. A four-fold increase in the IgG titer from the time an acute specimen is drawn (within one week of onset of disease) to when a convalescent specimen is drawn (2-4 weeks after onset of disease), indicates a recent infection.
- When testing for a recent infection, IgM AND IgG testing on paired sera (acute/convalescent) is best.

Disease Status	IgM	Acute IgG	Convalescent IgG
Recent infection	High	Not present or low	Four-fold increase
Past Infection	Low or not detectable	Present	No or slight increase

* General information; disease specific criteria should be used when determining timing for IgM and IgG testing

Many thanks to Denise Higgins, Montana Public Health Laboratory, for her assistance in writing this "snippet".

THE "BUZZ"

Influenza

Montana – Activity level in Montana for week 10 is **NO ACTIVITY.** **NEW!** There was one PCR confirmed case of H1N1 influenza the week of March 15, in a Fergus County resident who had exposure to an ill person who acquired their illness from Ohio. There was intra-family spread related to this case. **IMPORTANT!** ***Interpret positive rapid influenza tests with caution at this time.*** A positive screening test result is most likely to be truly positive during periods of peak influenza activity in the population tested. A positive screening test result is most likely to be falsely positive during periods of low influenza activity in the population tested, including early and late in the influenza season. Per IDSA Guidelines, a confirmatory test such as PCR or viral culture should be considered (http://www.journals.uchicago.edu/doi/pdf/10.1086/598513). Current information on influenza testing by the Montana Public Health Laboratory can be found at http://www.dphhs.mt.gov/PHSD/Lab/environ-lab-index.shtml.

United States - During week 10 (03/13/10), influenza activity stayed at the same level as the previous week. (http://www.cdc.gov/flu/weekly/)

Diarrheal Disease and Food Recalls

Hydrolyzed Vegetable Protein Product Recalls - The U.S. Food and Drug Administration is actively investigating findings of *Salmonella* Tennessee in hydrolyzed vegetable protein (HVP) manufactured by Basic Food Flavors, Inc., in Las Vegas, NV. HVP is a flavor enhancer used in a wide variety of processed food products, such as soups, sauces, chilis, stews, hot dogs, gravies, seasoned snack foods, dips, and dressings. **At this time, no illnesses associated with this contamination have been reported to the FDA; however, multiple food products are involved in this recall.** Updates to the recall list can be found at: http://www.fda.gov/Safety/Recalls/MajorProductRecalls/HVP/default.htm.

INFORMATION / ANNOUNCEMENTS

NEW! Rabies 4 Dose PEP Recommendations Released - The March 19 issue of the MMWR contains new recommendations for rabies PEP in unvaccinated persons. Previously, ACIP recommended a 5-dose rabies vaccination regimen for post-exposure prophylaxis. **These new recommendations reduce the number of vaccine doses to four.** For persons previously unvaccinated with rabies vaccine, the reduced regimen of 4 1-mL doses of HDCV or PCECV should be administered intramuscularly. The first dose of the 4-dose course should be administered as soon as possible after exposure (day 0). Additional doses then should be administered on days 3, 7, and 14 after the first vaccination. ACIP recommendations for the use of RIG remain unchanged. PEP recommendations for other circumstances and/or special populations HAVE NOT changed. Prompt rabies PEP combining wound care, infiltration of RIG into and around the wound, and multiple doses of rabies cell-culture vaccine continue to be highly effective in preventing human rabies. Details about the new recommendations are attached (http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5902a1.htm).

Summary of Current Recommendations for Rabies PEP: http://www.cdc.gov/rabies/exposure/postexposure.html

NEW! Ticks Are Out! - With the warmer weather, ticks are out and about again! As a reminder, if virus-specific serum antibody titers are being used to diagnose disease (e.g., Rocky Mountain spotted fever, tick-borne relapsing fever, Colorado tick fever, Q fever) the CDC *surveillance case definitions* for these diseases generally require acute and convalescent phase testing in order to confirm as a case. (see surveillance snippet above)
For more information on case definitions: http://www.cdc.gov/ncphi/disss/nndss/casedef/case_definitions.htm.

NEW! CDC Everyday Preventive Actions – CDC has released a new version of its "Everyday Preventive Actions" educational brochure: http://www.cdc.gov/flu/freeresources/2009-10/pdf/everyday_preventive.pdf

2008 Antibiogram – The 2008 cumulative state antibiogram, results from a survey of 34 laboratories from across Montana, is now available at http://mara.mt.gov/documents/2008Antibiogram.pdf. Questions? Jan Stetzer at jstetzer@mt.gov or 406.444.0695

24/7 AVAILABILITY

The Communicable Disease Epidemiology program is available 24 hours a day/7days a week/365 days a year. Please call 406.444.0273 if you need immediate communicable disease epidemiology assistance. The answering service will take a message and we will return the call as quickly as possible.

This newsletter is produced by the Montana Communicable Disease Epidemiology Program. Questions regarding its content should be directed to 406.444.0273 (24/7/365). For more information: *http://cdepi.hhs.mt.gov*.